



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Shelby Resources LLC  
2717 Canal Boulevard  
Suite C  
Hays Kansas 67601  
ATTN: Charlie Sturdavant

**3/22S/17W/Pawnee**

**Froetschner #1-3**

Job Ticket: 61962

**DST#: 2**

Test Start: 2015.11.22 @ 01:02:00

## GENERAL INFORMATION:

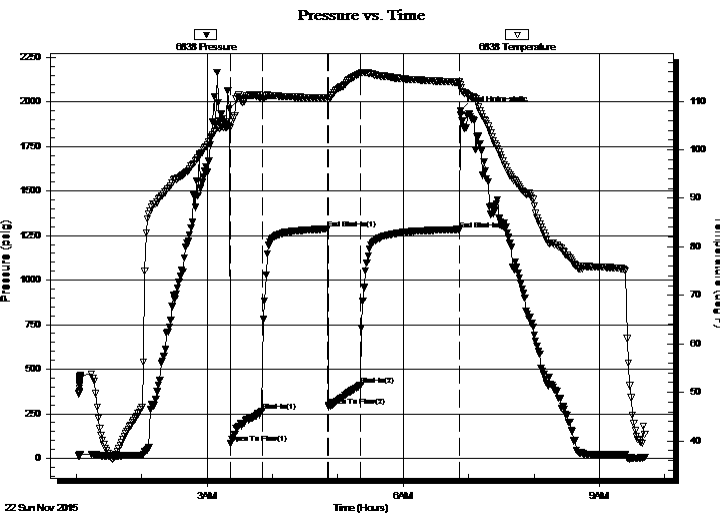
Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 03:21:31  
 Time Test Ended: 09:42:31  
 Interval: **3895.00 ft (KB) To 4013.00 ft (KB) (TVD)**  
 Total Depth: 4013.00 ft (KB) (TVD)  
 Hole Diameter: 7.80 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 58 Great Bend/54  
 Reference Elevations: 2031.00 ft (KB)  
 2020.00 ft (CF)  
 KB to GR/CF: 11.00 ft

## Serial #: 6838

Inside

Press @ Run Depth: 409.50 psig @ 4009.18 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.11.22 End Date: 2015.11.22 Last Calib.: 2015.11.22  
 Start Time: 01:02:01 End Time: 09:42:31 Time On Btm: 2015.11.22 @ 03:20:46  
 Time Off Btm: 2015.11.22 @ 06:52:31

TEST COMMENT: 1ST Open 30 Minutes/Strong blow/Blow built to bottom of bucket in 6 minutes  
 1ST Shut In 60 Minutes/No blow back  
 2ND Open 30 Minutes/Strong blow/Blow built to bottom of bucket in 7 minutes 30 seconds  
 2ND Shut In 90 Minutes/No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1964.08	104.77	Initial Hydro-static
1	81.61	104.55	Open To Flow (1)
30	262.47	110.52	Shut-In(1)
90	1286.68	110.71	End Shut-In(1)
91	294.40	110.35	Open To Flow (2)
121	409.50	115.74	Shut-In(2)
211	1284.65	113.93	End Shut-In(2)
212	1949.01	113.28	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
834.00	Muddy water with show of oil	9.71
0.00	Mud 25% Water 75%	0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



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Job Ticket: 61962

**DST#: 2**

Test Start: 2015.11.22 @ 01:02:00

## GENERAL INFORMATION:

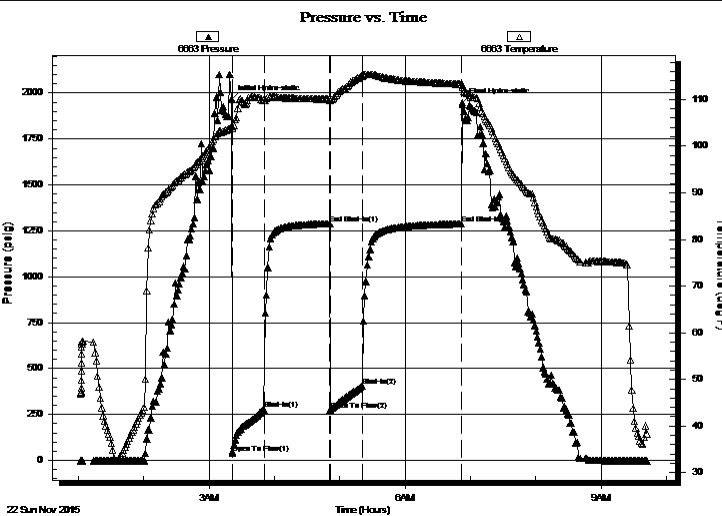
Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 03:21:31  
 Time Test Ended: 09:42:31  
 Interval: **3895.00 ft (KB) To 4013.00 ft (KB) (TVD)**  
 Total Depth: 4013.00 ft (KB) (TVD)  
 Hole Diameter: 7.80 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 58 Great Bend/54  
 Reference Elevations: 2031.00 ft (KB)  
 2020.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 6663**

**Outside**

Press @ Run Depth: 1287.38 psig @ 4010.18 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.11.22 End Date: 2015.11.22 Last Calib.: 2015.11.22  
 Start Time: 01:02:01 End Time: 09:42:31 Time On Btm: 2015.11.22 @ 03:20:46  
 Time Off Btm: 2015.11.22 @ 06:52:31

**TEST COMMENT:** 1ST Open 30 Minutes/Strong blow/Blow built to bottom of bucket in 6 minutes  
 1ST Shut In 60 Minutes/No blow back  
 2ND Open 30 Minutes/Strong blow/Blow built to bottom of bucket in 7 minutes 30 seconds  
 2ND Shut In 90 Minutes/No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1966.43	104.23	Initial Hydro-static
1	41.15	103.85	Open To Flow (1)
30	277.57	109.80	Shut-In(1)
90	1289.21	110.05	End Shut-In(1)
91	275.81	109.76	Open To Flow (2)
121	406.18	115.04	Shut-In(2)
211	1287.38	113.30	End Shut-In(2)
212	1946.58	113.03	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
834.00	Muddy water with show of oil	9.71
0.00	Mud 25% Water 75%	0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shelby Resources LLC

**3/22S/17W/Pawnee**

2717 Canal Boulevard  
Suite C  
Hays Kansas 67601

**Froetschner #1-3**

Job Ticket: 61962

**DST#: 2**

ATTN: Charlie Sturdavant

Test Start: 2015.11.22 @ 01:02:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

16000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4800.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
834.00	Muddy water with show of oil	9.715
0.00	Mud 25% Water 75%	0.000

Total Length: 834.00 ft      Total Volume: 9.715 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Resistivity .7 ohms @ 40 deg

